

Notice of Allowability

Application No.

10/773,810

Examiner

Anh V. La

Applicant(s)

LEIGHTON, KEITH R.

Art Unit

2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the Amendment filed on Oct. 26, 2006 and the IDS filed on Aug. 24, 2006 and July 11, 2006.
2. ☒ The allowed claim(s) is/are 1-44.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date 7/11/06, 8/24/06
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

ANH V. LA
PRIMARY EXAMINER
02/14/07

Anh V La
Primary Examiner
Art Unit: 2612

I. Examiner's Amendment:

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CAR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.
2. Authorization for this examiner's amendment was given in a telephone interview with Mr. Joshua L. Jones on August 03, 2007.

Examiner's Amendment

In the specification:

In the specification, after the title of the invention, the paragraph

"This application claims the benefit of (a) provisional application Serial No. 60/142,019, filed Jul. 7, 1999 and (b) Serial No. 09/158,290, filed September 22, 1998 (now U.S. Patent No. 6,214,155), which is a continuation of Serial No. 08/727,789 (now U.S. Patent No. 5,817,207), which claims the benefit of provisional application Ser. No. 60/005,685. filed on Oct. 17, 1995."

has been changed to

- - This application claims the benefit of (a) provisional application Serial No. 60/142,019, filed Jul. 01, 1999 and (b) Serial No. 09/158,290, filed September 22, 1998 (now U.S. Patent No. 6,214,155), which is a continuation of Serial No.

08/727,789 (now U.S. Patent No. 5,817,207), which claims the benefit of provisional application Ser. No. 60/005,685. filed on Oct. 17, 1995. - -.

In the claims:

New claims 19-44 have been underlined as following:

- -19. A process for incorporating an electronic element in a plastic device, comprising the steps of:

(a) providing first and second plastic core sheets;

(b) positioning the electronic element between the first and second plastic core sheets to form a core;

(c) positioning the core in a laminator apparatus, and subjecting the core to a heat and pressure cycle, the heat and pressure cycle comprising the steps of:

(I) heating the core;

(II) applying a first pressure to the core such that the electronic element is encapsulated by the core; and

(III) cooling the core while applying a second pressure to the core.

20. The process of Claim 19, wherein step (c)(III) comprises cooling the core while applying a second pressure to the core, wherein the second pressure is greater than the first pressure.

Art Unit: 2612

21. The process of Claim 20, wherein step (b) comprises positioning the electronic element in the absence of a non-electronic carrier between the first and second plastic core sheets to form the core.

22. The process of Claim 20, wherein step (b) comprises positioning the electronic element in the absence of a non-electronic carrier directly between the first and second plastic core sheets to form the core.

23. The process of Claim 19, wherein step (c)(III) comprises cooling the core while applying a second pressure to the core, wherein the second pressure is approximately at least 10% greater than the first pressure.

24. The process of Claim 19, wherein step (c)(I) comprises heating the core under a third pressure, wherein the third pressure is less than the first pressure.

25. The process of Claim 20, wherein step (c)(II) comprises applying the first pressure uniformly to the core such that the electronic element is encapsulated by the core.

26. The process of Claim 20, wherein step (c)(III) comprises cooling the core while applying the second pressure uniformly to the core.

27. The process of Claim 20, wherein the electronic element comprises a micro-chip.

28. The process of Claim 27, wherein the electronic element further comprises a circuit board antenna.

29. The process of Claim 27, wherein the electronic element includes a protective coating thereon.

30. A process for manufacturing a plastic device that includes an electronic element therein, comprising the steps of:

(a) providing first and second plastic core sheets;

(b) positioning the electronic element between the first and second plastic core sheets to form a core;

(c) positioning the core in a laminator apparatus;

(d) heating the core;

(e) causing the laminator apparatus to apply a first pressure to the core such that the electronic element is encapsulated by the core; and

(f) cooling the core while the laminator apparatus applies a second pressure to the core, wherein the second pressure is greater than the first pressure.

Art Unit: 2612

31. The process of Claim 30, wherein step (f) comprises cooling the core while the laminator apparatus applies the second pressure to the core, wherein the second pressure is approximately at least 10% greater than the first pressure.

32. The process of Claim 31, wherein step (b) comprises positioning the electronic element in the absence of a non-electronic carrier between the first and second plastic core sheets to form the core.

33. The process of Claim 31, wherein step (b) comprises positioning the electronic element in the absence of a non-electronic carrier directly between the first and second plastic core sheets to form the core.

34. The process of Claim 30, wherein the electronic element comprises a micro-chip.

35. The process of Claim 34, wherein the electronic element further comprises a circuit board antenna.

36. The process of Claim 34, wherein the electronic element includes a protective coating thereon.

37. A process for incorporating an electronic element in a plastic device, wherein the electronic element has a top surface and a bottom surface, comprising the steps of:

(a) providing top and bottom plastic core sheets;

(b) positioning the electronic element between the top and bottom plastic core sheets to form a core, wherein the top surface of the electronic element is in contact with the top plastic core sheet;

(c) positioning the core in a laminator apparatus, and subjecting the core to a heat and pressure cycle, the heat and pressure cycle comprising the steps of:

(I) heating the core;

(II) applying a first pressure to the core so that the electronic element is encapsulated by the core; and

(iii) cooling the core while applying a second pressure to the core, wherein the second pressure is greater than the first pressure.

38. The process of Claim 37, wherein step (c)(III) comprises cooling the core while applying a second pressure to the core, wherein the second pressure is approximately at least 10% greater than the first pressure.

39. The process of Claim 37, wherein step (b) comprises positioning the electronic element between the top and bottom plastic core sheets to form the core, wherein the

top and bottom surfaces of the electronic element are in contact with the top and bottom plastic core sheets, respectively.

40. The process of Claim 37, wherein step (b) comprises positioning the electronic element in the absence of a non-electronic carrier between the top and bottom plastic core sheets to form the core.

41. The process of Claim 37, wherein step (b) comprises positioning the electronic element in the absence of a non-electronic carrier directly between the top and bottom plastic core sheets to form the core.

42. The process of Claim 37, wherein the electronic element comprises a micro-chip.

43. The process of Claim 42, wherein the electronic element further comprises a circuit board antenna.

44. The process of Claim 42, wherein the electronic element includes a protective coating thereon. - -.

Art Unit: 2612

II. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anh V. La whose telephone number is (571) 272-2970.

The examiner can normally be reached on Mon-Fri from 9:30am to 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Wu can be reached on (571) 272-2964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



ANH V. LA
PRIMARY EXAMINER

Anh V La
Primary Examiner
Art Unit 2612

AI
August 03, 2007